A Rare Case of Chronic Sialadenitis of Accessory Parotid Gland

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Abstract The accessory parotid gland is salivary tissue adjacent to stenson's duct that is separated from the main parotid gland and lying on masseter muscle. It has secondary duct emptying into the stenson's duct. The differential diagnosis of mid-cheek masses include pathology arising from normal anatomic structures or from variations of normal accessory parotid gland tissue. Surgical resection is the treatment of choice for the accessory parotid gland tumor. We report a case of accessory parotid gland with chronic sialadenitis in a 26 years old male with the diagnosis and treatment. Accessory parotid gland pathologies should be included in the differential diagnosis of a patient presently with a mid-cheek mass.

Keywords Accessory parotid gland ·
Chronic sialadenitis

Introduction

The accessory parotid gland is a small unit of salivary gland tissue and lying on the masseter muscle [3]. It is found that approximately 21% of human parotids have an accessory component. Herein, we describe a case of accessory parotid gland with chronic sialadenitis. Lesion from this area may arise from normal anatomic anterior facial structure or from variations of normal accessory

parotid gland tissue [2, 4, 6, 8, 12]. These glands typically lie between the buccal and zygomatic branches of the facial nerve and may have multiple connections by way of one or more small tributary arising from stenson's duct both benign and malignant processes may arise in this area from skin, lymphatic, adnexal, neurologic and salivary structures of all parotid gland tumors, 1 to 8% arise in accessory parotid gland [7, 8]. The rate of malignancy has been reported to be from 26 to 50% [4, 9].

Case Report

A 26 year old male presented with a painless mass in the left mid-cheek region that had appeared about one year earlier. Patient presented with history of increase in the size of mid-cheek swelling on mastication. Physical examination disclosed 25 × 20 mm mobile elastic mass. There was no pain or facial nerve palsy (Fig. 1).

The magnetic resonance imaging (MRI) revealed a well defined solid mass tumor on the masseter muscle, separated from the main parotid gland (Fig. 2) the accessory parotid gland was diagnosed on the basis of fine needle aspiration cytology. Surgical resection of the gland was planned.

The patient was taken under general anaesthesia; the accessory gland was resected through modified Blair incision. The stenson's duct was identified and a secondary duct emptying into the main duct was found (Fig. 3). The buccal branch of the facial nerve was identified between the main parotid gland and accessory parotid gland. The accessory parotid gland was removed along with the accessory duct, Stenson's duct and the main superficial parotid gland. The resected accessory parotid gland measured 2.5 × 2.5 × 0.6 cm (Fig. 4) The histopathology report confirmed the diagnosis of accessory parotid gland

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Fig. 1 Clinical photography of patient showing accessory parotid gland and accessory parotid duct

Fig. 3 Intra-operative photography showing accessory parotid gland with accessory duct

Fig. 2 MRI showing separated accessory parotid gland from main parotid gland

with accessory duct (3.5×0.4 cm) with mild chronic non-specific sialadenitis.

Discussion

The accessory parotid gland is a salivary tissue separated from the main parotid gland it is usually located on the anterior portion of the main gland and has a secondary duct emptying into the stenson's duct. The accessory parotid gland reportedly occurs in 21% off individuals [3, 4, 8, 10]. The differential diagnosis of masses of the mid-cheek region include parotid gland cyst or anterior venous malformation, stenson's duct stone, cyst or neoplasm, hemangioma, adnexal tumors, neural tumors, benign or malignant adenopathy, metastatic disease and benign or

Fig. 4 Photography showing excised accessory parotid gland, accessory parotid duct and superficial parotid gland

malignant tumors of the accessory parotid tissue [2, 4, 5, 6, 8, 11]. Their average distance from the main parotid duct has been reported to be approximately 6 mm. They are usually found in the middle of an imaginary line extending from the tragus to a midway point between the ala of the nose and vermilion border of the upper lip [8].

Fine needle aspirate provides a valuable tool in the evaluation of a mid-cheek mass CT and MRI scans may be useful in establishing anatomic relationship [1, 8, 12]. It has been reported that CT combined with sialography is an intrinsic parotid gland tumor from extrinsic tumors. Surgical resection is the mainstay of the treatment of accessory parotid gland pathology. It is important to identify the buccal branch of the facial nerve. There are two surgical approaches either a standard parotidectomy incision or facelift incision along the hairline provides excellent exposure for resection of accessory parotid gland, allowing

good visualization of facial nerve branches. Potential complications include recurrence, facial nerve paralysis and salivary fistula [9]. Our patient recovered without any complications except for mild facial weakness postoperatively which recovered in 2 months.

Conclusion

Accessory parotid gland pathologies should be included in the differential diagnosis of a patient presenting with a mid-cheek mass. Proper preoperative evaluation included physical examination, fine needle aspiration cytology and imaging studies. A standard facelift or parotidectomy approach is a safe and cosmetically appealing approach for the surgical management of pathologies arising from an accessory parotid gland tissue.

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